The effects of cultural familiarity on reading comprehension

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Abstract

This study investigated whether cultural familiarity influences comprehension of short stories and whether nativizing the story or using reading activities can compensate for the lack of such familiarity. The study was conducted with 44 advanced-level students of English at a state university in Turkey. In a 2 × 2 experimental research design, the 1st group of students read an original short story without any activities while the 2nd group of students read the original short story with some activities. The 3rd group read the nativized version of the text without any activities while the 4th group read the nativized version with the same set of activities as the 2nd group. The analysis of variance indicated a better comprehension of the nativized story. The activities contributed to the comprehension of the original story, but the difference caused by nativization remained intact, indicating a powerful impact of cultural schema on comprehension.

Keywords: reading comprehension, schema theory, cultural schema, nativization

Readers, when engaged in reading, are believed to go through an active and interactive process (Anderson, 1999; Grabe & Stoller, 2002). Such a process presumes that readers have or should have some background knowledge about the topic of the text. Anderson, for example, explained reading as follows:

Reading is an active, fluent process which involves the reader and the reading material in building meaning. Meaning does not reside on the printed page. ... Synergy occurs in reading, which combines the words on the printed page with the reader's background knowledge and experiences. (p. 1)

Reading as an interactive process requires various mental operations to be performed concurrently or very closely in time. When students read, they are likely to proceed from processing the text in smaller units of language to larger conceptual units (Perfetti, 1985). In fact, readers tend to deal with both micro-level text-driven features, such as pattern recognition, letter identification, and lexical access, and macro-level reader-driven features, such as activation of prior knowledge and monitoring comprehension (Berhnardt, 1991; Brantmeier, 2004). Each of these processes requires valuable memory space and may sometimes overload the working memory, which is limited in capacity (Baddeley, 1997; McLaughlin, Rossman, & McLeod, 1983; Miller, 1956; Pulido, 2003).

Such limited capacity can be further overloaded by the extra efforts that students make when reading. Readers' efforts to deal with micro-level linguistic features may place so much demand on the readers that not enough resources can be allocated to macro-level textual analysis (Afflerbach, 1990; Alptekin, 2006). It has been argued, however, that the cognitive load can be lessened by activation of the background knowledge that readers bring to the text (Carrell, 1988; Ellis, 2001; Nassaji, 2002; Pulido, 2004). When readers bring relevant background knowledge to the reading process, they can allocate more attentional space for textual analysis and interpretation. In this sense, existing background knowledge may contribute to the functioning of what are described as *automatic processes* by McLaughlin (1987), sparing valuable attentional space for more unfamiliar and newer elements in the text.

The place of background knowledge in the reading process has been discussed within schema theory (Bartlett, 1932; Carrell & Eisterhold, 1983). Schema theory deals with "preexisting knowledge structures stored in the mind" (Nassaji, 2002, p. 444) and how readers combine their previous knowledge with the text (Ajideh, 2003; Alderson, 2000; Alptekin, 2006; Anderson, 1999; Carrell, 1983; Carrell & Eisterhold, 1983; Grabe & Stoller, 2002; Johnson, 1981, 1982; Ketchum, 2006; McKay, 1987; Murtagh, 1989). In the rest of this paper, the terms *schema* and *background knowledge* will be used synonymously and interchangeably. Background knowledge that readers make use of during their engagement with the text is thought to be of various types (Carrell & Eisterhold, 1983; Nassaji, 2002; Oller, 1995). Of the different types, the most frequently referred to and discussed are *formal* and *content* schemata.

Formal schema, also called *textual schema* (Singhal, 1998), is defined as knowledge of language and linguistic conventions, including knowledge of how texts are organized and what the main features of a particular genre of writing are (Alderson, 2000; Carrell, 1987, 1988; Carrell & Eisterhold, 1983). Research into formal schema suggests that "texts with familiar rhetorical organization should be easier to read and comprehend than texts with unfamiliar rhetorical organization" (Carrell, 1987, p. 464).

Content schema, which is described as knowledge of the content (Carrell, 1983), can further be divided into two different types: background knowledge and subject matter knowledge. The former refers to the knowledge that may or may not be relevant to the content of a particular text, and the latter is directly related to the text content and topic (Alderson, 2000).

A third type of schema, which is more relevant to this study, is *cultural schema* (Yule, 1996). It is also called *abstract schema* (Nassaji, 2002; Oller, 1995), *story schema* (Mandler, 1984), or *linguistic schema* (Ketchum, 2006). Ketchum proposed cultural schema as a culture-specific extension of content schema because it refers to the role of cultural membership that is needed to fully comprehend the meaning intended by the writer.

Abstract in nature, cultural schema involves cultural familiarity and helps readers to reconstruct the story line through referring to more personally and culturally relevant scripts (Oller, 1995). One effect of this is a lessened workload to reconstruct scripts and make personal interpretations, because such texts entail involvement with "real material persons, events, places, and sociocultural relations with which [readers] can identify and find some common ground" (Oller,

1995, p. 299). This is probably because different concepts may have different referents in different cultural contexts and may thus generate different expectations on the reader's part. Such cultural specificity can be seen in the example of breakfast (Alptekin, 2008). Although most people from the same society will understand similar things about having breakfast, Turkish and British readers may have different expectations about breakfast. Turkish readers may often expect to have cheese, olives, jam, honey, tomatoes, cucumber, and brewed tea (with no milk at all) for breakfast. British readers may expect to have cereal, toast, butter and jam, honey, and tea (with or without milk) or coffee; or for a cooked breakfast, to have sausages, bacon, baked beans, hash browns, fried eggs, and grilled tomatoes. Thus, cultural schema, not dependent on the surface forms utilized in the formation of the text, involves more than a mere literal comprehension of the content of the text (Alptekin, 2006).

Several studies have reported positive effects of cultural familiarity on reading comprehension (Alptekin, 2006; Steffensen, Joag-Dev, & Anderson, 1979) and vocabulary learning (Pulido, 2003, 2004). Steffensen et al., for example, demonstrated that when students are familiar with cultural norms, they make a better interpretation of the text than when they are not. Further, in cases of unfamiliar cultural norms, students tend to refer to their own cultural properties, which results in poor interpretations of the text.

More recently and more relevant to this study, Alptekin (2006) illustrated that when cultural elements of a short story are nativized to make the text culturally more familiar, students can make better inferences than when they read the original but culturally-remote story. Alptekin's findings give support to Oller's (1995) assertion that changing certain words in authentic texts with more familiar ones helps readers to achieve better comprehension.

Alptekin's (2006) work is different from other schema-related studies (e.g., Carrell, 1988) in that he did not use two texts of similar difficulty but made use of the same text only by changing some cultural elements, such as the names of people and places, and by adapting them to the students' own cultural context. This, according to Alptekin, reduces the possible bias posed by varying levels of conceptual density and complexity in different texts. He claimed

the role of cultural background knowledge . . . needs to be investigated not necessarily in the framework of two texts that are thought to be syntactically, lexically, and rhetorically equivalent, but in the context of the *same text* used in two different ways, one being the original and the other a culturally nativized version. Nativization refers to the pragmatic and semantic adaptation of the textual and contextual clues of the original story into the learner's own culture, while keeping its linguistic and rhetorical content essentially intact. (p. 497)

Alptekin's (2006) approach is plausible as he attempts to minimize possible intervening variables in the experimentation process. It would be worth replicating and extending his study to achieve a better understanding of the phenomena. Further, minimizing possible intervening variables in such a procedure could also lend itself to the investigation of other elements involved in the reading process. One such element is the activities used in a reading class. Working through nativized texts may prove convenient to measure how effective the use of activities is in compensating for the lack of relevant cultural schema. Thus, this research aimed to extend

Alptekin's work and to show whether activities can make up for the lack of cultural familiarity.

Reading Activities

From a more pedagogical standpoint, suggestions have been made to use certain activities for activating readers' existing schema or at least providing learners with crucial information about the topic they will be reading (Ajideh, 2003; Brown, 2001; Chastain, 1988; Chen & Graves, 1995; Grabe, 1991). The use of reading activities can promote strategic reading behaviors by students at pre-, while-, and postreading (Alyousef, 2006; Ur, 1996) stages. In turn, reading activities can promote interpretation of the text through the interaction between the reader and the text (Wallace, 1992) and thus play a vital role in schema activation in order to comprehend and interpret the text better (Chen & Graves, 1995; Grabe & Stoller, 2002).

Despite the fairly well-documented impact of background knowledge on reading comprehension and a host of activities suggested, it still remains to be explored whether, or to what extent, the lack of cultural knowledge can be compensated through the use of reading activities. Erten and Karakaş (2007) noted that our knowledge on the value of these activities mainly stems from pedagogical recommendations or personal experiences and often lacks scientific scrutiny. Only a handful of studies have investigated which is more effective, using a particular activity on the same text (e.g., Karakaş, 2005) or making use of different activities on the same text with different groups of students (e.g., Chen & Graves, 1995; Erten & Karakaş, 2007; Shen, 2004).

Karakaş (2005), for example, showed that a combination of previewing and brainstorming is more effective than merely using brainstorming with short stories. Along the same lines, Chen and Graves (1995) explored the effectiveness of previewing and providing background knowledge and concluded that previewing is more effective than providing background knowledge. A contrasting finding comes from Shen (2004), who found that providing background knowledge, in fact, could help learners better with their comprehension. Finally, Erten and Karakaş (2007) reported that some activities (e.g., a combination of previewing, providing keywords, scanning, skimming, clarifying, asking and answering questions, and drawing conclusions) contributed to the literal comprehension, while others (e.g., a combination of brainstorming, surveying, reciprocal teaching, evaluation, inferring, re-reading, thinking aloud, and discussion), contributed better to the evaluative comprehension of short stories.

With due acknowledgment to these efforts, it is necessary to note that there has not been an attempt to compare the influence of the presence or absence of cultural familiarity with the effect of classroom activities used. It therefore remains to be investigated whether cultural schema influences reading comprehension, and more importantly, whether the use of activities can make up for the absence of cultural knowledge. This study aims to contribute to our understanding of these issues. It addresses the following two research questions:

- 1. Does readers' familiarity with the cultural content of short stories affect their comprehension?
- 2. Do reading activities used with short stories make up for the lack of cultural schema?

Based on the above literature review, the study hypothesized that cultural familiarity has a significant impact on reading comprehension and that although reading activities contribute to comprehension, the impact of cultural familiarity remains a significant factor.

Method

The study was conducted in the English Language Teaching Department of the Faculty of Education at a state university in the west of Turkey. The department was considered suitable for the study because the teacher training program included a short stories component. The Short Stories course, taught by a colleague of the authors, offered an appropriate medium for research as well as constant access to the students.

Participants

Forty-four students from the department participated in the study. The participants were young adults (aged 20–23). They were all being trained to become teachers of English. At the time of the data collection, they had studied English for 7–9 years (M = 7.5) and were in their 3rd year of university education. The participants had an advanced level of English language proficiency and thus met the minimum language requirements to be included in the study. They had been accepted into the department after a very competitive nationwide university placement exam, administered by the University Entrance and Placement Centre of the Turkish Higher Educational Council. Students enrolled in the department often fall into a very narrow band of the top 10%. Therefore, the researchers expected the participants to have similar levels of English proficiency.

The participants were randomly assigned, according to their grade point average (GPA), into four groups to create a 2×2 experimental research design. For the sampling, the participants' cumulative GPAs at the end of their fifth term in the department were calculated by taking account of only the English-based courses and English-medium-teacher-training courses. Once the cumulative GPAs were calculated, the GPAs were grouped into nine ranges, as illustrated in Table 1.

Table 1. Ranges of participants' GPAs

Group	Range
1	4.00–3.75
2	3.74–3.50
3	3.49–3.25
4	3.24-3.00
5	2.99–2.75
6	2.74-2.50
7	2.49–2.25
8	2.24-2.00
9	1.99–1.75

Finally, 11 students from different ranges of GPAs were assigned evenly to different treatment groups so as to form homogenous groups that were later labeled *Treatment 1* (original text no activities, henceforth "ONA"), *Treatment 2* (original text with activities, henceforth "OWA"), *Treatment 3* (adjusted text no activities, henceforth "ANA"), and *Treatment 4* (adjusted text with activities, henceforth "AWA"). Table 2 shows the mean GPA values for each treatment group.

Table 2. Mean GPA values for each treatment group

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Name of the Group	N	M	SD
Original text no activities	11	2.57	0.43
Original text with activities	11	2.52	0.28
Adjusted text no activities	11	2.60	0.29
Adjusted text with activities	11	2.57	0.42

An analysis of variance revealed no significant differences among the treatment groups, F = 0.095, p < .96, indicating a reasonable homogeneity of these groups.

Materials

The reading text. The short story "The Girls in their Summer Dresses" by Irwin Shaw (2000), a popular classic first published in 1939, was chosen for the study. The story is about a couple trying to take a Sunday off in the city of New York.

The story was nativized for research purposes. The nativization (Alptekin, 2006) functioned as an independent variable and provided students with a locality that they were culturally familiar with. For clarity, it needs to be noted that the terms *nativized* and *adjusted* are used synonymously and interchangeably in the rest of this paper.

In the nativization process, the names of the characters were changed to Turkish names. Care was taken while adjusting the narrated city plan of New York to Çanakkale, a coastal Turkish city. All the names of the places, streets, and buildings had to make sense in readers' minds in order to activate their schema about the city of Çanakkale. Furthermore, the sequence of actions had to conform to the original story. For example, in the original story, the couple leaves the Brevoort and starts walking towards Washington Square along Fifth Avenue. In the nativized story, the couple leaves Barışkent (a suburb in the city of Çanakkale) and starts walking towards Republic Square along Kordonboyu (the seafront).

Apart from these changes, some conceptual cues also had to be changed in order to complete the nativization process. For example, in the nativized story, the characters planned to eat fish (which was steak in the original story) because Çanakkale is a coastal city along the Dardanelles. The main changes are illustrated in Table 3, and some samples from each version of the story are given in Appendix A.

Reading test. A recall test (see Appendix B) was administered at the end of the reading session. The test was written for the two different versions of the story: nativized and original. The posttest included three different elicitation techniques: The first group of questions used "True/False/Not Given," the second group of questions involved "Putting scrambled actions into

the correct order," and the third group used "Open-ended short-answer questions" to test comprehension. Students were not allowed to refer to the reading text during the posttest period, nor were they allowed to use dictionaries.

Table 3. Examples of differences between the two versions

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Original short story	Nativized short story	
Character		
Michael (Mike) Loomis	Coşkun Umutlu	
Frances	Özlem	
The Stevensons	Nalan & Tarık	
Place		
New York/City of New York/State of New York	Çanakkale/City of Çanakkale	
Alice Maxwell's house	Tarık Uyanık's house	
Fifth Avenue	Kordonboyu	
The Brevoort	Barışkent	
Washington Square	Republic Square	
Eighth Street	Golf Tea Garden/Republic Square	
Football game	Basketball game—Turkish women's championship	
	Culture	
Rolls and coffee	Turkish baguettes and tea	
An extra five pounds of husband	An extra several kilos of husband	
A steak as big as a blacksmith's apron	A fish as big as a man's arm	
A bottle of wine	A big bottle of rakı	
A new French picture at the Filmarte	A new Turkish picture "O Şimdi Asker" (He's in	
	the army now) at the AFM cinema	

Reading activities. In addition to reading the text, class activities were chosen to address the three stages of a normal reading class: prereading, while-reading, and postreading. The activities were used with only two groups: the OWA group and the AWA group. The activities used in the class have been described by several authors (e.g., Chastain, 1988; Grabe & Stoller, 2002; Lazar, 1993; Ur, 1996; Wallace, 1992) as typical of classes where short stories are examined.

This study did not intend to compare the effectiveness of different reading activities. Rather it aimed to compare the differences in readers' comprehension with or without reading activities in the two reading conditions (i.e., original text and adjusted text) created for the research purposes. Therefore, we aimed to construct the typical flow of a short-story class with which participants of the study were familiar. This resulted in the use of the same activities in conditions where their use was planned. Since the students were acquainted with the activities, the researchers did not feel the need to spend extra time explaining and illustrating these activities. The activities selected will be outlined in detail below.

Procedure

The first group of participants was given the original text without activities, while the second group did some reading activities as the participants read the original text. The third group read

the nativized version without activities. Finally, the last group was asked to perform some activities while reading the nativized version. Table 4 illustrates the lesson plans for each group of students.

Table 4. Procedures for each group of students

Treatment 1	Treatment 2	Treatment 3	Treatment 4
ONA	OWA	ANA	AWA
Original text was	Prereading activities:	Nativized text was	Prereading activities:
given without	Brainstorming (3')	given without	Brainstorming (3')
activities (30')	Pre-questioning (3') While-reading activities:	activities (30')	Pre-questioning (3') While-reading activities:
	Reading the story (35')		Reading the story (35')
	Scanning (2')		Scanning (2')
	Skimming (2')		Skimming (2')
	Clarifying (2')		Clarifying (2')
	Reciprocal teaching (2')		Reciprocal teaching (2')
	Inferring (2')		Inferring (2')
	Postreading activities:		Postreading activities:
	Thinking aloud (2')		Thinking aloud (2')
	Asking and answering		Asking and answering
	questions (2')		questions (2')
Posttest (15')	Posttest (15')	Posttest (15')	Posttest (15')
Total 45'	Total 60'	Total 45'	Total 60'

Note. ONA = Original text with no activities; OWA = Original text with activities; ANA = Adjusted text with no activities; AWA = Adjusted text with activities.

At the prereading stage, the participants were first asked to brainstorm on expectations in a relationship. They were then guided to some questions that they could answer by referring to their background knowledge, such questions as how they would plan a free Sunday with their girl or boy friends. Approximately 3 minutes was allocated for each activity of this stage. Although the timings were not strictly controlled, care was taken not to allocate uneven amounts of time for a particular activity with the two activity groups. This was also true for activities at the other two stages of reading.

After the prereading activities, the participants were instructed to move onto the while-reading stage during which they were asked to read the short story silently. This period took approximately 35 minutes, during which the silent reading process was interrupted by a number of while-reading activities. For example, the participants were asked to explain the relationship between Michael and Frances (Çoşkun & Özlem in the adjusted text) by skimming the text. Since this relationship can be inferred in the very early parts of the story, this activity was completed in nearly 2 minutes. Similarly, participants were required to scan the short sections of the text within very short periods of time. For example, the participants scanned the first paragraph of the story to find out where the couple lived.

Clarifying was done when the need arose. As participants read the text, they were encouraged to indicate any confusion that prevented understanding the text. When needed, other participants were encouraged to make clarifications. The class teacher provided clarifications where other

^{&#}x27; = minutes.

participants could not. Thus, clarifying was done as a separate activity that preceded reciprocal teaching rather than being a component of it. Following this, the participants were involved in the other three components of reciprocal teaching: summarizing, questioning, and predicting. These were teacher-led activities for research purposes. Within a short period of time they were asked to summarize and ask questions about what they have read and predict what might happen later in the story. As the last activity in the while-reading stage, the participants were asked to say what could be inferred from particular parts of the story.

During the postreading stage, the participants were asked to think aloud on the text to identify possible comprehension problems and then answer questions such as "Why did Frances (Özlem in the adjusted text) cry?"

Data Analysis

Marking the papers. Two independent raters marked the students' papers for comprehension only and ignored the grammatical mistakes in their answers to the open-ended questions in order to minimize the effect of any variation among the students' writing skills, as otherwise they would have been assessing writing skills rather than reading comprehension. The ordering part of the posttest was marked according to the Weighted Marking Protocol (Razı, 2005), which enabled partial evaluation. The marking procedure in this protocol is based on correcting the wrong order of events provided by the participants and reducing their marks with reference to their mistakes. This protocol works on the basis of giving some marks to students even if they do not put all the events in the right order, thus awarding partial success rather than giving no marks at all.

Interrater reliability for marking the papers. The marks given to the students' papers by the two independent raters were analyzed through the Pearson Correlation Coefficient Test. A high correlation coefficient was found between the two sets of marks, r = 89, p < .01, which was considered to be consistent enough to proceed with further statistical analysis.

Statistical analysis. The participants' posttest scores were analyzed by using ANOVA, and a post-hoc LSD (least significant difference) test was employed to find out where the group differences occurred. Cohen's d was also used to calculate the effect size.

Results

The descriptive statistics are presented in Table 5. As can be seen, considerable differences existed between the groups' performances. The two groups that received the nativized version of the story scored higher than the other two groups, with the AWA group being the most successful.

The differences observed between different treatment conditions were statistically significant, F = 6.85, p < .001. Group differences were examined through a post-hoc LSD Test. The results are illustrated in Table 6.

Table 5. *Mean scores of groups*

Treatment condition	N	M	SD
AWA	11	79.18	9.98
ANA	11	69.91	10.28
OWA	11	64.55	10.25
ONA	11	60.45	13.03

Note. ONA = Original text with no activities; OWA = Original text with activities; ANA = Adjusted text with no activities; AWA = Adjusted text with activities.

Table 6. Results of the post-hoc LSD test on group differences

Conditions	Mean Difference	р	Cohen's d
ONA vs. OWA	-5.00	.277	0.35
ONA vs. ANA	-10.36*	.028	0.81
ONA vs. AWA	-19.64**	.000	1.61
OWA vs. ANA	-5.36	.244	0.52
OWA vs. AWA	-14.64**	.003	1.45
ANA vs. AWA	-9.27*	.048	0.92

Note. ONA = Original text with no activities; OWA = Original text with activities; ANA = Adjusted text with no activities; AWA = Adjusted text with activities. *p < .05. **p < .01.

As can be seen in Table 6, highly significant differences existed between the treatment groups. The first hypothesis of this study (that cultural familiarity has a significant impact on reading comprehension) was sufficiently supported by the between-group differences, which confirmed that cultural familiarity did influence the students' comprehension. The ANA group outperformed (M = 69.91) the ONA group (M = 60.45), with a considerable effect size (d = 0.81). The second pairing yielded even bigger differences: The AWA students (M = 79.18) did significantly better than the OWA students (M = 64.55), indicating a large effect size (d = 1.45).

The second hypothesis (that although reading activities contribute to comprehension, the impact of cultural familiarity remains a significant factor) was also supported by the results obtained from the cross-comparisons between the groups. As expected, the AWA students (M = 79.18) outperformed the ANA students (M = 69.91), showing the effects of reading activities on reading comprehension. The difference also indicated a large effect size (d = 0.92). Similarly, the AWA students also did much better than the ONA students (M = 60.45), with a large effect size (d = 1.61). However, the difference between the OWA and ONA students was not statistically significant (d = 0.35), implying that the activities did not help comprehension much with the original text. Similarly, no significant difference was observed between the OWA students and the ANA students (d = 0.52). The students who read the original text with some activities (M = 64.55) did not perform significantly better than the students who read the adjusted text with no activities (M = 69.91). Conversely, they did slightly worse.

Discussion

The present study aimed to investigate the effects of cultural familiarity on reading comprehension as well as to discover whether activities can make up for possible gaps in

students' relevant cultural schema, which is a common suggestion in the field.

With regard to the first question, the results confirmed what has been widely acknowledged as the positive effect of background knowledge and cultural familiarity on reading comprehension (e.g., Alderson, 2000; Alptekin, 2006; Ketchum, 2006; Oller, 1995; Pulido, 2003; Steffensen et al., 1979). The difference between the two groups' performances in comprehension suggested a strong possibility that the students who read the nativized version of the story possessed relevant cultural background knowledge, which reduced the cognitive load imposed by the complex reading procedures (Perfetti, 1985) on the memory system (Baddeley, 1997; Ellis, 2001; Kintsch, 1998; McLaughlin et al., 1983), as opposed to the students who had to deal with unfamiliar cultural content and visualize the script in their minds. In the culturally familiar version, where the text was nativized, the students seemed to find it easier to allocate attentional resources to more linguistic elements and construct mental representations of the familiar context. In contrast, it was much more difficult for the students to create mental representations of the unfamiliar context, which prevented the economical use of attentional resources.

The effect of cultural familiarity may also be related to motivational issues, although studies in this area are few. Recent work on attitudes and motivation has shown that motivation is related to achievement (e.g., Dörnyei, 2003), involving many factors such as ownership and interest (Williams & Burden, 1997). In the realm of reading research, two types of interest have been proposed as contributing to motivation, namely, personal interest and situational interest (Alexander & Jetton, 2000). The first is related to one's general approach to reading while the latter is generated by the text. The latter category can be of practical value in explaining the variable performances of the students in this study.

The students in the nativized story group might have enjoyed the situational interest aroused by the text. Tomlinson (1998), for example, maintained that when students see elements of their local culture in classroom materials, they feel much more engaged and identify themselves with the context of the text. Such a personal appeal has also been shown as one of the sources of situational interest (Schraw, Bruning, & Svoboda, 1995). Thus, students in the nativized-story groups might have found the version much more appealing than those in the original-version groups, which had no local reference at all. Such an appeal might, in turn, have contributed to higher levels of motivation (Dörnyei, 2003, 2005; Harter, 1981; Williams & Burden, 1997) and thus led to a better reading comprehension (e.g., Guthrie, Wigfield, Metsala, & Cox, 1999; Wigfield, 1997).

As for the effects of the activities, one cannot deny their value in the process of reading comprehension, though this study did not aim to compare the effectiveness of the activities as such. In fact, the activities did contribute to comprehension significantly; however, this effect varied noticeably. The differences between the ANA and AWA groups pointed to the positive effects of reading activities. The insignificant difference between the ONA and OWA groups and the inferior performance of the OWA group compared to the ANA group were interesting. Further, there was a considerable difference between the OWA and ANA groups. The activities used in this study were probably not adequate in compensating for the gaps in cultural familiarity between the two groups. Nor did they make the OWA group's comprehension better than that of the ONA group, or even that of the ANA group, as compared to the significant difference

observed in between the AWA group and the ANA group. This was probably because the gaps in cultural knowledge were so big that the activities used with the OWA group did not make much difference in activating the necessary schema. Contrary to the groups that read the original story, the significant difference observed between the AWA group and the ANA group can be attributed to the activities that built on an already active conceptual infrastructure (or macro-level features). With such available schematic resources, the activities could fulfill the functions ascribed to them, which were not possible with the original story groups. The nativized version of the story is very likely to have facilitated the mental representation so that the students did not need extra activities to activate the background knowledge. This enabled optimum allocation of attention to micro-level features.

Conclusion and Implications

Two conclusions, with some caveats described below, can be drawn from this study. Firstly, cultural familiarity facilitates comprehension. Secondly, although reading activities do activate schematic knowledge and promote strategic reading behaviors, the influence of cultural familiarity remains intact. Therefore, if readers lack the relevant cultural schema, reading activities cannot fully compensate for the discrepancy or help readers comprehend a text.

This study is not without limitations. Firstly, this study was not designed to measure the effectiveness of individual reading activities. Instead, the use of reading activities was instrumental in investigating the influence of cultural schema on reading comprehension. Further, the selection of the activities used in this study was not based on experimental scrutiny; rather, it was based upon pedagogical descriptions provided in the field. Therefore, different activities aiming at providing more background knowledge and further elaboration on texts may yield different results.

Care also needs to be taken in interpreting the results of this study. Although efforts were made to homogenize the groups on the basis of their GPA scores, more standardized tests of proficiency such as TOEFL or IELTS could have contributed to more homogeneous sampling of the groups. Further, recent research on reading processes and the variables involved suggests motivational and attitudinal factors are related to reading comprehension. These elements were not taken into account in this study. A better-controlled measurement could shed further light on the phenomenon. Finally, the study was conducted with a small sample of students. A larger sample could tolerate individual variations better in statistical analysis.

Despite these limitations, the results of this study have important pedagogical implications. Given the fact that the scores were higher with the nativized version of the story, materials that contain references to local elements or have personal relevance can produce a facilitative influence and can be useful in language classes. However, it may not always be possible, nor is it always desirable, to use texts only with direct local or personal references. Thus, one cannot underestimate the importance of activities in the process of reading.

This study did not investigate the efficiency of a single pedagogical intervention in promoting reading comprehension. Rather, it focused on whether the use of a set of activities could

contribute to comprehension. Therefore, the study cannot endorse one activity over another. However, the fact that the groups that read the text and also did the activities performed better than the groups that did not do the activities suggests that the reading teacher should make use of class activities. Related to the scope of this study, it would not be unwarranted to propose that activities that can tap into cultural knowledge or provide cultural knowledge, such as using visual aids, previewing, pre-questioning, and brainstorming, can help readers comprehend better. More research is needed to see whether such activities or combinations of such activities can help readers in foreign language reading classes.

A related issue concerned the teacher dominance during the activities for this research. Because of the whole-class fashion in conducting the reading class, this study could not observe how individual learners performed in the activities and what cognitive processes they went through. Future research that implements introspective research methods for data collection may obtain a clearer picture of the interactions between cultural familiarity and comprehension as well as the contributions of individual activities to the reading process. Finally, it would be useful to learn how instruction can be adjusted to encourage more reader autonomy so that readers can take responsibility for comprehension of culturally familiar or unfamiliar texts.

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Appendix A

Examples of Nativization

Original short story	Nativized short story
Fifth Avenue was shining in the sun when they left the Brevoort and started walking toward Washington Square.	Kordonboyu was shining in the sun when they left Barışkent and started walking toward Republic Square.
"First let's go see a football game. A professional football game," Frances said, because she knew Michael loved to watch them. "The Giants are playing. And it'll be nice to be outside all day today and get hungry and later we'll go down to Cavanagh's and get a steak as big as a blacksmith's apron, with a bottle of wine, and after that, there's a new French picture at the Filmarte that everybody says Say, are you listening to me?" They joined hands consciously and walked without talking among the baby carriages and the old Italian men in their Sunday clothes and the young women with Scotties in Washington Square Park.	"First let's go see a basketball game – Turkey Championship of women. A professional basketball game," Özlem said, because she knew Coşkun loved to watch them. "Fenerbahçe are playing. And it'll be nice to be outside all day today and get hungry and later we'll go down to Albatros Fish Restaurant and get a fish as big as a man's arm, with a big bottle of rakı, and after that, there's a new Turkish picture - O Şimdi Asker - at the AFM that everybody says Say, are you listening to me?" They joined hands consciously and walked without talking among the baby carriages and the old ANZAC tourists jogging along Kordonboyu.
"I love the way women look. One of the things I like best about New York is the battalions of women. When I first came to New York from Ohio that was the first thing I noticed, the million wonderful women, all over the city. I walked around with my heart in my throat."	"I love the way women look. One of the things I like best about Çanakkale is the battalions of women. When I first came to Çanakkale from Erzurum that was the first thing I noticed, the thousands of wonderful women, all over the city. I walked around with my heart in my throat."
"I like the girls in the offices. Neat, with their eyeglasses, smart, chipper, knowing what everything is about, taking care of themselves all the time." He kept his eye on the people going slowly past outside the window. "I like the girls on Forty-fourth Street at lunchtime, the actresses, all dressed up on nothing a week, talking to the good-looking boys, wearing themselves out being young and vivacious outside Sardi's, waiting for producers to look at them. I like the salesgirls in Macy's, paying attention to you first because you're a man, leaving lady customers waiting, flirting with you over socks and books and phonograph needles. I got all this stuff accumulated in me because I've been thinking about it for ten years and now you've asked for it and here it is."	"I like the girls in the offices. Neat, with their eyeglasses, smart, chipper, knowing what everything is about, taking care of themselves all the time." He kept his eye on the people going slowly past outside the window. "I like the girls at Küçümen at lunchtime, the university students, all dressed up on nothing a week, talking to the good-looking boys, wearing themselves out being young and vivacious outside Lodos Disco, trying to forget all about lessons. I like the salesgirls at Gima, paying attention to you first because you're a man, leaving lady customers waiting, flirting with you over socks and dried fruits and cakes. I got all this stuff accumulated in me because I've been thinking about it for ten years and now you've asked for it and here it is."

Appendix B

Examples of Recall Test Items

TRUE/FALSE ITEMS

Write (T) if the given statement is true; write (F) if it is false; and write (NG) if it is not mentioned in the story.

- Michael & Frances have known each other for two years.
- The Stevensons know what Michael feels for other women.
- Michael looks at other women only in the streets.
- Frances feels good all day when she has breakfast with Michael.
- The Stevensons will come to the bar to pick them up.

PUT THE FOLLOWING EVENTS INTO ORDER

Below are eight statements from the short story you have just read. Put them into the correct order of happening. Write number in parentheses.

- (....)They walked to a bar on Eight Street.
- (....) Frances began to cry, silently, into her handkerchief.
- (....)Frances & Michael had slept late and had a good breakfast.
- (....) They decided to call the Stevensons.
- (....) They started to walk from the Brevoort toward Washington Square.
- (....)Frances got up from the table and walked across the room.
- (....)Frances planned a day of activities that Michael will enjoy.
- (....) Frances asked Michael to stop talking about women and to keep it to himself.

SHORT ANSWER QUESTIONS

- 1. Why does Frances want to take Michael to a football match?
- 2. Why does Frances feel good on that Sunday morning?
- 3. How has Michael physically changed since he moved from Ohio?
- 4. What does Michael do when something bad happens?
- 5. What is the favor that Frances asks Michael to do for her?

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